OPERATION AND MAINTENANCE MANUAL

Electronic cutting band saw for bench
Art. 0500

FERVI
PRO SMART EQUIPMENT

TRANSLATION OF THE ORIGINAL INSTRUCTIONS

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PREFACE

Please ensure you have read this manual before any operation

TRANSLATION OF THE ORIGINAL INSTRUCTIONS

Before undertaking any operation on the machine, it is compulsory to have read this instruction manual. The guarantee that the machine will function and perform properly is strictly dependent upon the application of all the instructions contained in this manual.

Operator Qualifications

The workers in charge of using this machine must possess all the necessary information and instruction and should be given adequate training in relation to safety regarding:

a) Conditions of use for the equipment;

b) Foreseeable abnormal situations, pursuant to Article 73 of Italian Law Decree 81/08 (which adopts the EN rules).

We guarantee the Machine complies with the specifications and technical instructions described in the Manual on the date of its issuance (shown in this page). On the other hand, the machine may also be subject to important technical changes in the future, without the manual being updated.

Therefore, contact FERVI for information about modifications that may have been implemented.

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1 INTRODUCTION

This manual is delivered with the machine, and it must be regarded as an inseparable part of it.

The manufacturer holds all ownership to material and intellectual property of this manual; any disclosure or copying, even partial, of this publication without prior written consent is forbidden.

The purpose of this manual is to convey the necessary knowledge for the use and maintenance of **Electronic cutting band saw for bench Art. 0500** and to create a sense of responsibility and knowledge of the capabilities and limits of this machine entrusted to the operator.

Operators must be properly trained and prepared; therefore, please make sure this manual is read and consulted by the staff responsible for commissioning, operating and maintaining the **Electronic cutting band saw for bench**. This is to make all operations the safest and most effective possible for those who carry out these tasks.

Therefore, it is imperative to strictly comply with the requirements in this manual, a necessary condition for safe and satisfactory operation of the machine.

Prior to installation and use of the **Electronic cutting band saw for bench**, the authorized personnel shall:

- carefully read this technical document;
- know which protections and safety devices are available on the machines, their location and how they work.

It is the responsibility of the buyer to ensure that users are properly trained, that they are aware of all the information and instructions in this document and that they are aware of the potential risks that exist while working with the **Electronic cutting band saw for bench**.

The manufacturer waives any and all responsibility for damage to people and/or things caused by non-observance of the instructions in this manual.

The **Electronic cutting band saw for bench** has been designed and built with mechanical guards and safety devices designed to protect the operator/user from possible injury. It is strictly forbidden to modify or remove guards, safety devices and caution labels. If you have to do so temporarily (for example, for cleaning or repair requirements), please make sure that no one can use the machine.

Modifications to the machine carried out by the user must be considered their sole responsibility, therefore the manufacturer waives any and all responsibility for any damage caused to persons and/or property resulting from maintenance performed by unqualified personnel and in a manner unlike the operating procedures shown below.

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GRAPHIC REPRESENTATION OF SAFETY, OPERATIONAL AND RISK WARNINGS

The following boxes are designed to attract the attention of the reader / user for the **proper** and **safe** use of the machine:

Pay attention

This highlights behavioural rules to prevent damage to the machine and/or the occurrence of dangerous situations.

Residual Risks

This highlights the presence of dangers that cause residual risks to which the operator must pay attention in order to avoid injury or damage to property.

1.1 Preface

For a safe and effective use of **Electronic cutting band saw for bench Art. 0500**, you must read this manual carefully to acquire full knowledge of the machine and the general precautions to be observed during operation. In other words, machine durability and performance are strictly dependent on how it is used.

Even if already familiar with this sort of machines, it is necessary to follow the instructions herein, in addition to the general precautions to be observed while working.

- Acquire full knowledge of the machine.

  Read this manual carefully to understand: operation, safety devices and all necessary precautions. All this is to allow safe use of the machine.
- Wear appropriate clothing for the job.

  The operator must wear appropriate clothing, so as to prevent the occurrence of unpleasant accidents.
- Maintain the machine with care.

Using the Machine

The machine must only be used by qualified personnel trained to use the machine by authorized personnel.

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2 GENERAL SAFETY WARNINGS

2.1 General safety rules for machine tools

Risks related to Using the Machine

Do NOT underestimate the risks related to the use of the machine and stay focused on the work you are carrying out.

Risks related to Using the Machine

Despite the implementation of all safety devices for safe use of the machine, it is necessary to take note of all the accident prevention requirements highlighted in various parts of this manual.

Risks related to Using the Machine

Every person who is responsible for the use and maintenance of the machine should first have read the instruction manual, particularly the chapter dealing with safety.

It is recommended that the plant safety manager get written confirmation of the above.

Risks associated with using the machine

- During all work phases with the machine, you should proceed with great caution in order to avoid damage to persons, to the property or to the machine itself.
- Please use the machine only for its expected uses (drilling or tapping).
- Don't tamper with the safety devices equipping the machine.

Risks associated with using the machine

Before starting any work on the machine, the operator must wear the appropriate personal protective equipment (PPE) such as gloves and eye protection (see section 6.6 of this manual).

1. Always check the efficiency and integrity of the machine.
2. Before connecting the machine to the mains, make sure that the rotating parts are not damaged or badly worn. Make sure that the switch is in the neutral position.
3. Do not start the machine in an enclosed or poorly ventilated area, or in the presence of a flammable and/or explosive atmosphere. Do not use the machine in locations which are damp, wet, or even exposed to the rain.
4. Avoid starting accidentally.
5. Before starting the machine, get used to ensuring that no remaining adjustment or maintenance wrenches have remained inserted.

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6. Keep the workplace tidy and free from hindrances; disorder causes accidents.
7. Make sure that the work environment is forbidden to children, non-employees and animals.
8. Do not perform tasks on the machine other than those for which it was designed. Only use the machine in the manner in which it was intended, as described in this instruction manual.
9. Work without disturbances.
10. Work areas must be well lit.
11. Always wear eye protection and protective gloves while working. If dust is produced, use the appropriate masks.
12. Wear appropriate clothing. Loose clothing, dangling jewelry, long hair, etc.., can get caught in moving parts, causing irreparable injury.
13. Replace worn and/or damaged parts. Before operating, make sure guards and protections work correctly. If necessary, have them checked by Service staff. Use only original spare parts.
14. **Cut the mains voltage supply to the machine when:**
    - the machine is not being operated;
    - is left unattended;
    - you are performing maintenance or adjustment because the machine does not work properly;
    - you are replacing its tool;
    - in case the machine is being moved to another location;
    - you are cleaning the machine.
15. Do not use the machine in areas with a risk of fire and / or explosion.
16. It is recommended that users of this publication, for maintenance and repair, have a basic knowledge of mechanical principles and of repair technique procedures.
17. **Management in charge of safety is to make sure that the staff responsible for using the machine has read and understood this manual in its entirety.**
18. **Management is responsible for safety and verification of the company's risk status, pursuant to the law.**

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2.2 Safety regulations regarding the electric system of machine-tools

Risks associated with using the machine

1. Do not modify the electrical system in any way. Any attempt in this regard may jeopardize the operation of electrical devices, causing malfunction or accident.
2. Work carried out in the electrical system of the machine must, therefore, be carried out only by qualified and authorized personnel.
3. If you hear unusual noises, or you feel something strange, immediately stop the machine. Then carry out an inspection and, if necessary, perform any repairs as required.

1. The supply voltage must correspond to that stated on the identification plate and in the technical specifications. Namely: 230 Vac / 50 Hz.
   Never use any other type of power supply!
2. The use of a circuit breaker on the electric power supply is recommended. For more detailed information, contact a trusted electrician.
3. The power socket must be equipped with a grounding lead. The size of any extension cables must be equal to or greater than the one of the machine's own power supply cable (diameter ≥ 1.5 mm^2).
4. The power supply cable (and its possible extension cable) should never come in contact with hot objects, sharp edges, wet or oiled surfaces.
5. The power supply cable (and its possible extension cable) should be checked periodically, and before each use, for making sure they have no signs of damage or wear. If these are not in good condition, do not use the machine and replace the damaged cable.
6. Do not use the power cord to detach its plug from the socket.

2.3 Safety rules for band saws

1. Check in advance, the proper tightness between the material to be processed and clamp.
2. Do not move away from the machine until the blade and other moving parts, have completely stopped. For this purpose, only use the stop controls to stop the machine.

2.4 Technical Assistance

For any problems or concerns, please contact, without hesitation the Customer Service Department of your dealer, who has competent and specialized staff, specific equipment and spare parts.

2.5 Other provisions

IT IS FORBIDDEN TO TAMPER WITH SAFETY DEVICES

The first thing to do when starting work is to check for the presence and integrity of the protections and the operation of the safety devices.

If any defect is detected, do not use the machine.

Even more so, it is strictly forbidden to modify or remove guards, safety devices, labels and indication signs.

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3 TECHNICAL SPECIFICATIONS

Model	**Art. 0500**	
Height (mm)	580	
Width (including the reference bar) (mm)	620	
Depth (mm)	530	
Net weight (kg)	20	
Rated voltage (V)	230	
Power (W)	1800	
Frequency (80 - 16000 Hz)	50	
Current (A)	5	
Blade size (mm)	1140 x 13 x 0.65	
Blade speed (m/min)	20- 70	
Cutting angle	0° - 45°	
Bar section	o	□
0° (mm)	105	100 x 105
45° (mm)	55	55 x 60
Emitted acoustic power level (dB(A))	98	
Vibration transmitted to the hand-arm system (m/s^2)	2.0	

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4 DESCRIPTION OF THE MACHINE

The **BENCH BAND SAW (Art. 0500)** must only be used for cutting metal materials with the characteristics indicated below and within the limits recommended by the manufacturer and the safety and health norms.

The machine is designed and manufactured for cutting metal bars (section bars) with the following characteristics:

- circular section, solid or hollow, with a maximum diameter of 105 mm;
- polygonal section, solid or hollow, with a maximum size of 105 mm;

Other types of use, or the extension of use beyond that envisaged, does not correspond to the designation attributed by the manufacturer, and therefore the latter cannot accept any responsibility for any damage resulting therefrom.

Intended use and materials

- The machine was designed and manufactured for a specific use, different uses and non-compliance with technical parameters established by the Manufacturer may be hazardous to the operator.
- In particular, regarding the type of material, DO NOT cut "hardened" or "case-hardened" steel.

The Bench band saw consists of:

- a fixed base;
- the vice clamp to lock the piece;
- the electric motor, the drive pulleys for the cutting blade and belt mounted on the swivel head for the execution of angled machining;
- the handle for manual operation and the rest of the commands.

Refer to paragraph 4.1 of this manual to view the different parts of the machine in detail.

The continuously adjustable speed motor, allows the cutting speed to be set for each type of material.

The ergonomic handle ensures a solid and secure grip, moreover, the machine is equipped with a sustained action start button to guarantee the safety required during cutting.

The Band saw must be installed and used on flat supporting surfaces, with adequate ergonomic and resistance features, such as a workbench or a base.

The Band saw can operate in closed work environments (production halls, warehouses, etc.) or outdoors (construction sites, open spaces in general, etc.) .i.e. protected from the weather and where there is no danger of fire or explosion.

The operating temperature is within the range of -20 / +50°C.

The environment must also be sufficiently illuminated so as to ensure operation in maximum safety (at least 200 lux is recommended).

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4.1 Main parts of the machine

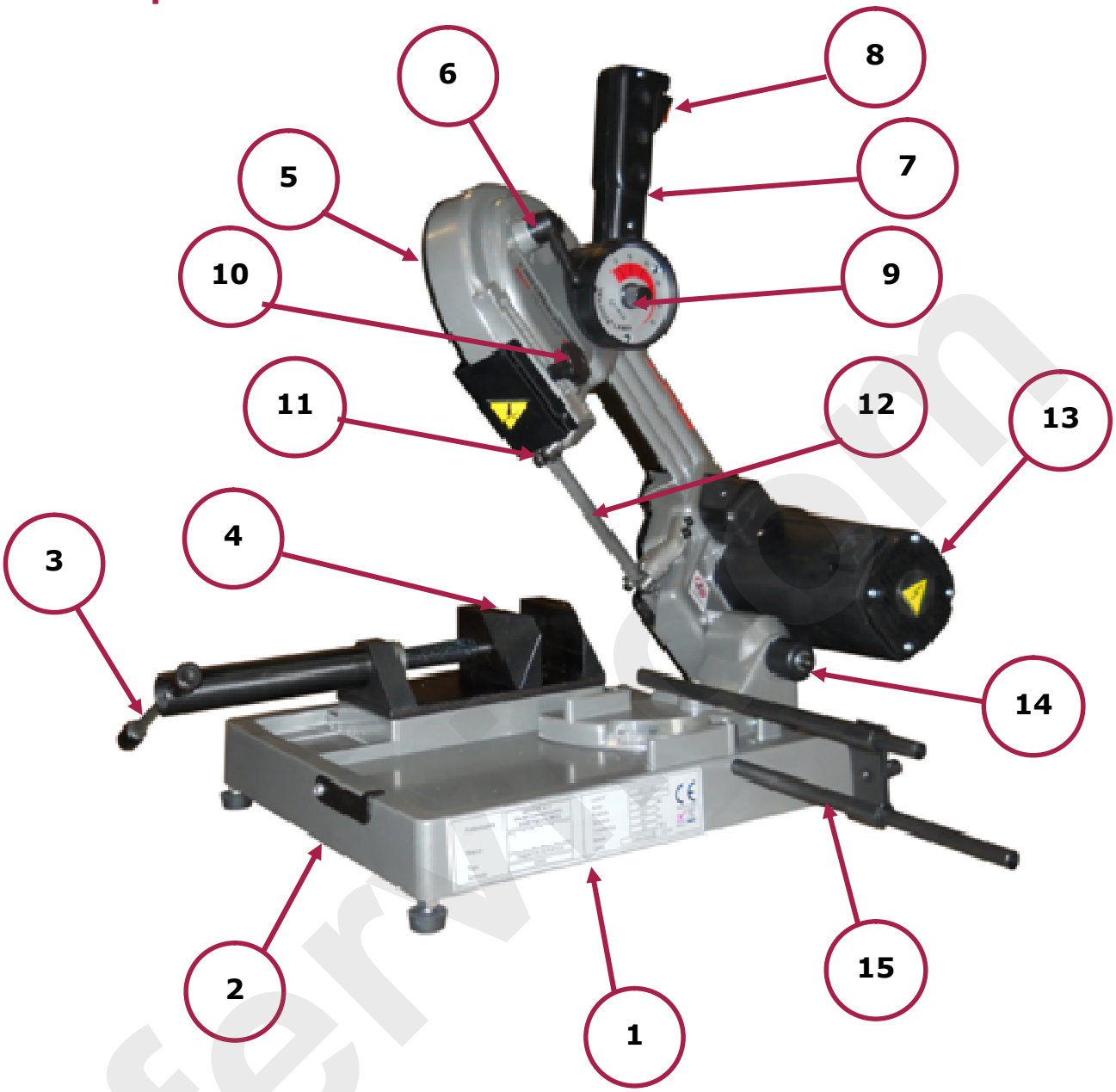

Figure 1 - Overview of the Machine

1	Base
2	Safety bracket for transport
3	Clamp activation lever
4	Clamp, piece-holder
5	Machine body
6	Saw tension lever
7	Handle
8	Start button
9	Belt speed adjustment knob
10	Blade guide locking lever
11	Blade guide
12	Blade (belt)
13	Electric motor
14	Rotation unit
15	Reference bars

4.2 Identification label

The identification plate shown below is attached to the machine:

Fabbricante	FERVI Via del Commercio 81, 41058 Vignola (MO)	Anno	2013		CE Made in PRC RoHS
Tipo	Segatrice a nastro	Potenza	1800	W	
Articolo	0500	Tensione	230	V	
Lotto n°		Frequenza	50	Hz	
		Massa	20	kg	
		Lama	1140x13x0.65	mm	

Figure 2 – Identification plate

4.3 Pittogrammi

The machine has the following pictograms:

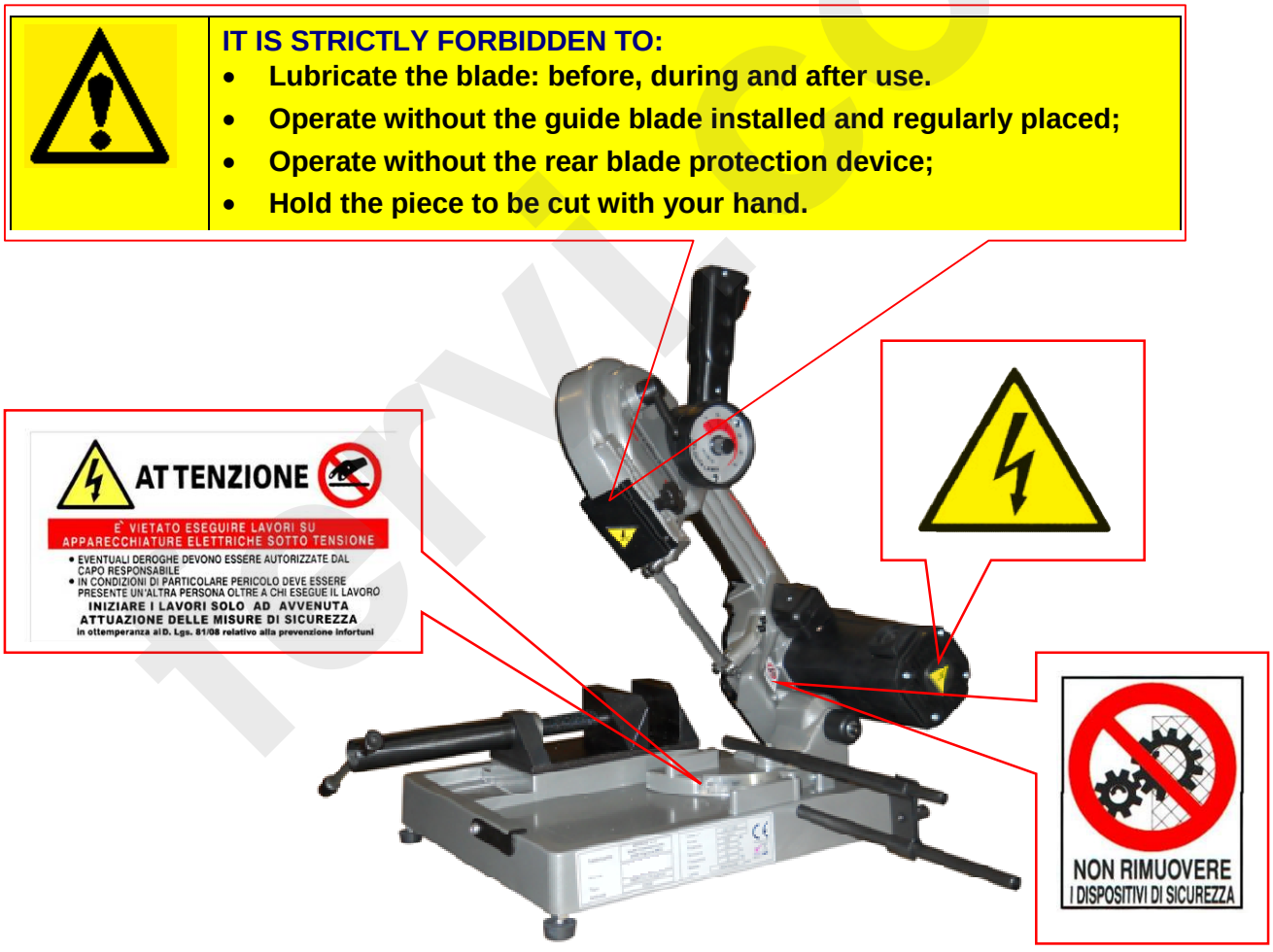
IT IS STRICTLY FORBIDDEN TO:
• Lubricate the blade: before, during and after use.
• Operate without the guide blade installed and regularly placed;
• Operate without the rear blade protection device;
• Hold the piece to be cut with your hand.
ATTENZIONE
È VIETATO ESEGUIRE LAVORI SU APPARECCHIATURE ELETTRICHE SOTTO TENSIONE
• EVENTUALI DEROGHE DEVONO ESSERE AUTORIZZATE DAL CAPO RESPONSABILE
• IN CONDIZIONI DI PARTICOLARE PERICOLO DEVE ESSERE PRESENTE UN'ALTRA PERSONA OLTRE A CHI ESEGUE IL LAVORO
INIZIARE I LAVORI SOLO AD AVVENUTA ATTUAZIONE DELLE MISURE DI SICUREZZA
in ottemperanza al D. Lgs. 81/08 relativo alla prevenzione infortuni
NON RIMUOVERE I DISPOSITIVI DI SICUREZZA

Figure 3 – Prohibition pictograms on the machine.

PLATE IN ITALIAN	PLATE IN ENGLISH
E' ASSOLUTAMENTE VIETATO: • **Lubrificare la lama: prima, durante e dopo l'uso;** • **Operare senza il guidalama installato e regolarmente posizionato;** • **Operare senza la protezione lama posteriore;** • **Bloccare con le mani il pezzo da tagliare.**	**IT IS STRICTLY FORBIDDEN TO:** • **Lubricate the blade before, during and after use.** • **Operate without the guide blade installed and regularly placed;** • **Operate without the rear blade protection device;** • **Hold the piece to be cut with your hand.**

ATTENZIONE
È VIETATO ESEGUIRE LAVORI SU APPARECCHIATURE ELETTRICHE SOTTO TENSIONE
• EVENTUALI DEROGHE DEVONO ESSERE AUTORIZZATE DAL CAPO RESPONSABILE
• IN CONDIZIONI DI PARTICOLARE PERICOLO DEVE ESSERE PRESENTE UN'ALTRA PERSONA OLTRE A CHI ESEGUE IL LAVORO
INIZIARE I LAVORI SOLO AD AVVENUTA ATTAZIONE DELLE MISURE DI SICUREZZA
In ottemperanza al Dgs.81/08 relativo alla prevenzioni infortuni

ATTENTION
IT IS PROHIBITED TO WORK ON LIVE ELECTRICAL EQUIPMENT
• ANY EXCEPTIONS MUST BE APPROVED BY THE HEAD MANAGER
• UNDER PARTICULARLY DANGEROUS CONDITIONS, ANOTHER PERSON MUST BE PRESENT WHO IS NOT PERFORMING THE WORK
ONLY BEGIN WORKING WHEN SAFETY MEASURES HAVE BEEN IMPLEMENTED
In accordance with Legislative Decree 81/08 on accident prevention

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Figure 4 – Warning pictograms on the machine.

5 DESCRIPTION OF THE CONTROLS

5.1 Start button

Found on the control handle of the band saw (see Figure 5 and ref. 7 in Figure 1) is the start button of the blade, consisting of a sustained action safety button.

This switch is equipped with a sliding safety catch (red) against accidental operation, for example in the case of an impact against the start button (see Figure 5).

Figure 5 – Start button.

To perform the cutting operations, it is necessary to rotate the blade, i.e.:

- move the safety catch down (yellow);
- hold the start button down.

Cutting hazard

It is absolutely forbidden to by-pass the safety feature constituted by holding down the start button, by trying to lock the button in the "ON" position.

NOTE: Given the operator's workstation and the reduced overall size of the machine, the sustained action start button is also an emergency stop switch.

Emergency

In the event of emergency, immediately release the start button and the handle and move away from the machine.

To stop the blade rotation, release the start switch. It automatically returns to the up position ("OFF").

Cutting hazard

- After releasing the start switch, the blade continues to rotate by inertia.
- Do not put body parts like hands and/or feet near the moving blade

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5.2 Cutting speed adjustment knob

Positioned at the base of the control handle of the Band saw (see Figure 6 and ref. 9 in Figure 1) is the cutting speed adjustment knob.

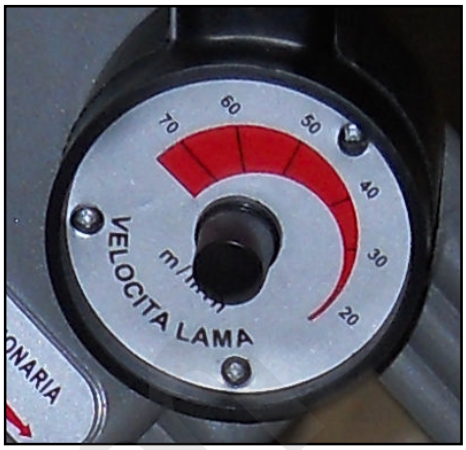

Figure 6 - Cutting speed knob

To adjust the cutting speed of the blade, turn the adjustment knob in the following way:

- rotate clockwise to decrease the cutting speed;
- rotate anti-clockwise to increase the cutting speed.

The cutting speed must be set according to the material to be cut, in line with the following specifications:

STAINLESS STEEL:	20 – 50	m/min
COPPER, ALUMINIUM AND ITS ALLOYS:	40 – 60	m/min
STEEL, ETC.:	50 – 70	m/min

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6 MACHINE SAFETY DEVICES

6.1 Electrical safety devices

In the event of malfunction or breakdown, the **BENCH BAND SAW** is equipped with a power cord and plug with a **earthing lead** that provides a path of minimal resistance to the electric current; thus it reduces the danger of electrocution.

The plug must be plugged into an appropriate socket, grounded in accordance with current regulation. Extension cables must be of a section equal to or greater than the power cable of the machine.

Electric shock.

Improper connection of the machine’s grounding conductor can result in the risk of electric shock.

Check with a qualified electrician if you don't understand the grounding instructions or if you have any doubts about grounding the machine.

6.2 Mechanical risk safety devices

6.2.1 Protective casing

They have the task of preventing parts of the operator's body, particularly hands and/or fingers, from coming into direct contact with the bandsaw blade.

This prevents the splinters, dust or blade fragments that eventually get separated from being thrown into the operator's face.

Checking the Safety devices

Each time you use the Bandsaw, check the proper functioning and integrity of the safety devices.

6.2.2 Safety start switch

The control device of the Band saw has a safety switch (button) which is held down, with a safety catch.

This prevents the danger of unwanted and/or accidental starts of the machine, since the activation of the blade can only be started through a voluntary action suitable for the given purpose (moving down the safety catch and pressing the button).

As said, the command requires maintained action, so the rotation of the blade continues until the operator releases the button itself.

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Use of PPE

In any case, ALWAYS use appropriate personal protective equipment such as:

- Gloves;
- Goggles or face shields;
- Overalls or aprons;
- Safety shoes.

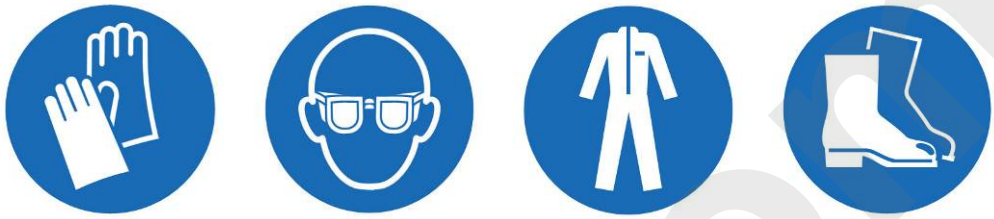

Figure 7 - Personal Protective Equipment.

6.3 Improper use and contraindications

The following actions described, which obviously can not cover the entire range of potential possibilities of "misuse" of the machine, are to be considered **strictly prohibited.**

IT IS STRICTLY FORBIDDEN!!!

- To use the machine without the guide blade installed and regularly placed;
- To hold with the hand the piece to be cut;
- To use the machine without the rear guard;
- To use the machine for purposes other than those for which it is designed, in particular, for cutting "hardened or cemented" steel;
- To use the machine to cut wood or similar materials;
- To exceed the cutting capacity stated by the manufacturer;
- To leave the machine unattended with the plug inserted;
- To allow untrained staff to use the machine;
- To operate this machine if you are not psychophysically fit;
- To use the machine without due attention;
- To use the machine without the use of appropriate personal protective equipment, such as, safety shoes and gloves, goggles or shields, etc.;
- To use the machine in unforeseen environmental conditions (weather, high magnetic fields, etc.);
- To use the machine in potentially explosive atmospheres;
- To use the machine in inadequate light;
- To let the machine come into contact with foodstuffs;
- To tamper with equipment and/or safety devices;
- To lubricate the blade before, during and after processing.

7 TRANSPORT AND LIFTING

The **BENCH BAND SAW** weighs 20 kg, so it can be lifted and moved by hand by a single operator. To do so, follow the instructions below:

- Disconnect the power plug from the outlet and pick up the cable, making sure that will not be damaged during transport;
- Fix the upper blade holder casing, in the fully lowered position using the proper safety bracket for transport (see Figure 8 and ref. 2 in Figure 1);

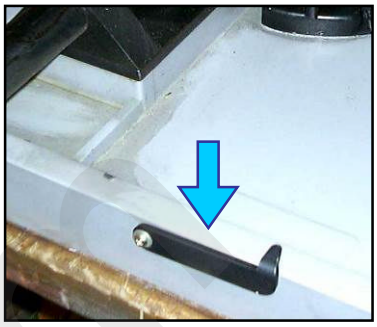

Figure 8 – Close-up of bracket

- After making sure it is properly secured, hold the centre of the upper machine casing and carefully lift (see Figure 9).

Figure 9 – Transporting the band saw.

Machine transport

- All transport operations must ALWAYS be carried out when the machine is stopped and no metal pieces are on the machine table.
- ALWAYS disconnect the power plug.

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8 INSTALLATION AND COMMISSIONING

8.1 Unpacking instructions

The **BENCH BAND SAW** is supplied ready for use, supplied with a band blade measuring 1140 mm x 13 mm x 0.65 mm and packed in a cardboard box.

Before disposing of packaging, check that no parts of the machine, including the user manual or other documentation, are going to be thrown away.

Also, make sure that at the time of unpacking, the machine is in perfect condition.

The manufacturer is not liable for any defects or missing parts five days after delivery.

Standard packaging

Packaging materials (plastic bags, polystyrene foam, etc.) must not be left within reach of children as these are potentially dangerous.

8.2 Positioning and fixing on the bench

Loss of Stability

Mount the Bench band saw on a surface that is solid and strong to avoid it falling over and so it does not cause vibrations;

Cleaning the work bench

Before fixing the machine in place, clean the workbench of any dirt that may be present.

Place the machine on a workbench (or other supporting surface) that is level, stable and sturdy and secure it with four bolts in the appropriate threaded fastening holes in the base of the machine body (see).

In the case of using a steel bench, it is advisable to place between the grinder and the supporting surface a layer of material which is suitable to reduce the vibrations.

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8.3 Connection of the electric power supply plug and start test

1. Insert the power supply plug into a grounded double pole socket (10/16 A, 230 V).
2. Start the machine by pressing the start button on the handle (see Figure 5) and make sure that the direction of rotation of the blade is as indicated by the arrow on the protective casing.
3. Before starting the cutting operation, check the saw as follows:
    - let it spin freely for at least 5 minutes;
    - with the protections in place;
    - without the presence of staff.

Collision of flying parts

During the test run, no operator and no other person should be within range of the machine.

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9 OPERATION

9.1 Instructions for Use

Operating the machine

- The Bench band saw (Art. 0500) should only be used with certain metallic materials (section bars, stainless steel, copper, aluminium and its alloys).
- Do not cut "hardened or case-hardened" steel parts.
- Do not cut pieces and/or structural steel exceeding the maximum permissible size (see the Technical Specifications).

Risk of abrasion and accident

- Before using the machine, make sure that it is rigidly fixed to the workbench to prevent unwanted movement or loss of stability.
- Wear appropriate personal protective equipment (PPE) such as gloves, goggles, overalls or aprons and safety shoes.

9.2 Adjustment of the machine and cutting

The machine is adjusted and used as follows:

1. Unlock the transport safety bracket, to enable the use of the saw.
2. Lift the upper part of the machine by the handle; in this position it should not descend by itself. Otherwise, tighten the screw which acts directly on the inner clutch of the rotation unit (see Figure 10).

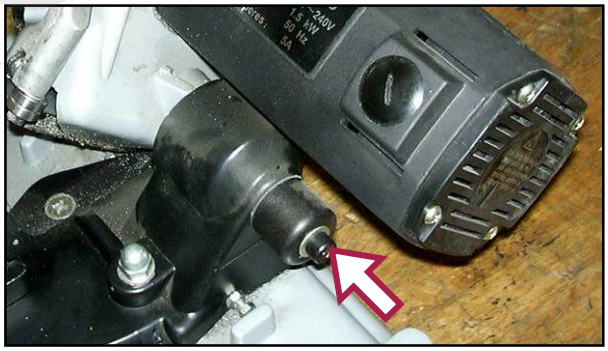

Figure 10 – Close-up of rotation unit screw.

3. Loosen the angle locking nut (ref. 16 in Figura 11) and manually select the desired cutting angle. In this regard, using the graded scale present on the machine itself.

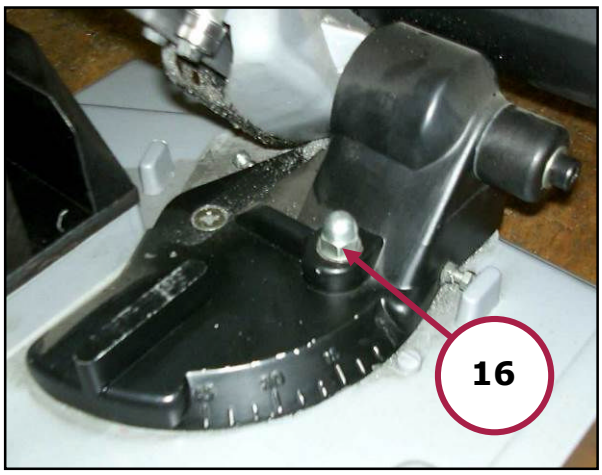

Figura 11 – Locking nut and graded scale.

4. After selecting the desired angle, tighten the angle locking nut (ref. 16 Figura 11).
5. Fit the reference rod into the hole (ref.17 in Figure 12) and secure it with the headless screw (ref.18 in Figure 12).
6. Loosen the knob (ref.19 in Figure 12) and slide the movable rod (ref.20 in Figure 12) determining the desired cutting height.
7. Tightly lock the knob (ref.19 in Figure 12).

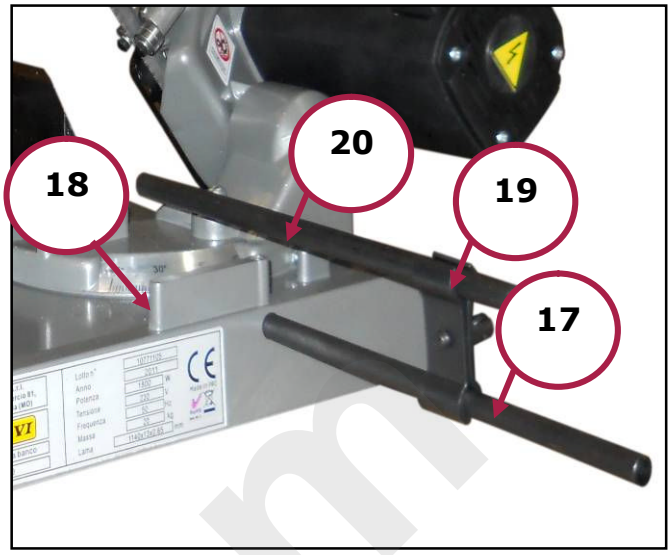

Figure 12 – Reference bar

1. Insert the piece / section bar to be cut within the clamp (ref.4 in Figure 1) resting it against the piece stop element and tightening it by screwing the clamp actuation lever (ref.3 in Figure 1).

   Adjust the position of the guide blade unit (see Figure 13 and ref.11 in Figure 1) that, in addition to being a useful guide for the band saw, also acts as a protection device to cover the part of the blade that does not serve the purpose of cutting.

   In this regard, loosen the lever (ref. 21 in Figure 13) by turning it anti-clockwise, slide the blade guide unit to the desired position (the one that leaves the blade uncovered as little as possible) and relock the lever to secure the unit in position.

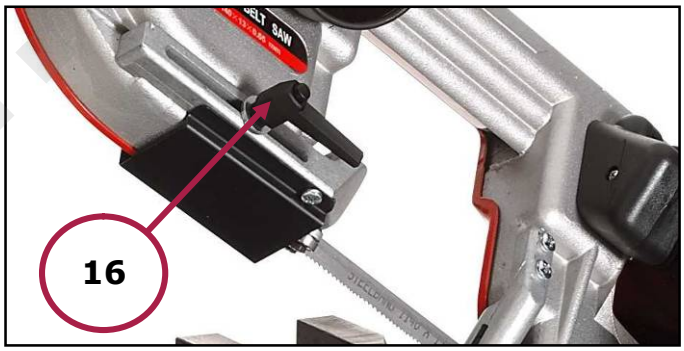

Figure 13 - Close-up of the blade guide unit.

2. Set the cutting speed of the cutting machine by adjusting the knob of the speed controller (see Figure 14).

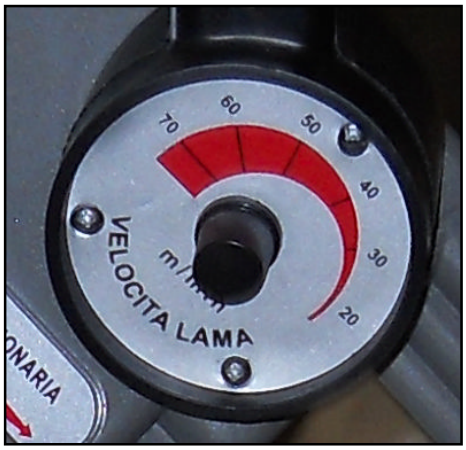

Figure 14 - Cutting speed knob.

To adjust the cutting speed of the blade, turn the adjustment knob in the following way:

- rotate clockwise to decrease the cutting speed;
- rotate anti-clockwise to increase the cutting speed.

The cutting speed must be set according to the material to be cut, in line with the following specifications:

STAINLESS STEEL:	20 – 50	m/min
COPPER, ALUMINIUM AND ITS ALLOYS:	40 – 60	m/min
STEEL, ETC.:	50 – 70	m/min

3. Hold the handle, move the safety catch downwards, press the start button and slowly lower the saw to start the cutting phase.

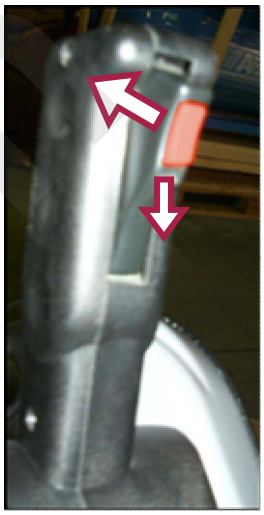

Figure 15 – Start button.

Cutting hazard

It is absolutely forbidden to by-pass the safety feature constituted by holding down the start button, by trying to lock the button in the "ON" position.

Emergency

In the event of emergency, immediately release the start button and the handle and move away from the machine.

Cutting hazard

- After releasing the start switch, the blade continues to rotate by inertia.
- Do not put body parts like hands and/or feet near the moving blade

4. At the end of the cutting operation, release the starter button and wait for the blade to stop completely, then loosen the clamp and remove the piece.

10 MAINTENANCE

Any maintenance, except for that specifically listed in this manual should be performed by qualified staff authorized by the manufacturer.

10.1 Routine maintenance

10.1.1 At the end of each machining

Electric shock

Before maintenance or checks, turn off the machine and ALWAYS unplug the plug from the power outlet. This is so that there is no risk of electric shock.

Regularly clean and take care of the machine to guarantee proper efficiency and a long working life.

Use a compressor to blow off shavings, chips, filings from cutting and dust that has accumulated on the floor of the machine and on the workbench at the end of each machining operation.

Working with compressed air

ALWAYS wear the protective goggles when using compressed air.

Check the state of the Band saw and CE plate and warning plate at the same time; If they are no longer legible ask for more.

Do not use the Band saw if there are any defects!!

Use only a dry cloth to clean the outside of the machine.

Cleaning the machine

DO NOT use detergents or any solvents; the plastic parts are easily damaged by chemical agents.

10.1.2 Periodically

Every 6 months of the machine's life, perform a thorough inspection of operation and wear.

Disconnect the power supply and check the length and efficiency of the electric motor brushes, which should not be less than 6 mm. Otherwise, replace them with identical parts.

The gear transmission does not require any maintenance.

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10.2Changing the bandsaw blade

Electric shock

Before replacing the blade, turn off the machine and ALWAYS remove the plug from the power outlet. This is so that there is no risk of electric shock or undesired activation of the machine.

Wear PPE

ALWAYS wear suitable protective gloves (to reduce the risk of cut) when replacing the blade.

When you notice excessive wear in the teeth of the blade, with the resulting loss of the ability to cut, replace it. In this regard, use a replacement blade with equivalent characteristics to those indicated by the manufacturer (see Technical Specifications).

1. Using the knob (see ref.27 in Figure 16 and Figure 17/B), unscrew the fixing screw for the angular plate of the moveable blade guide, then remove it.

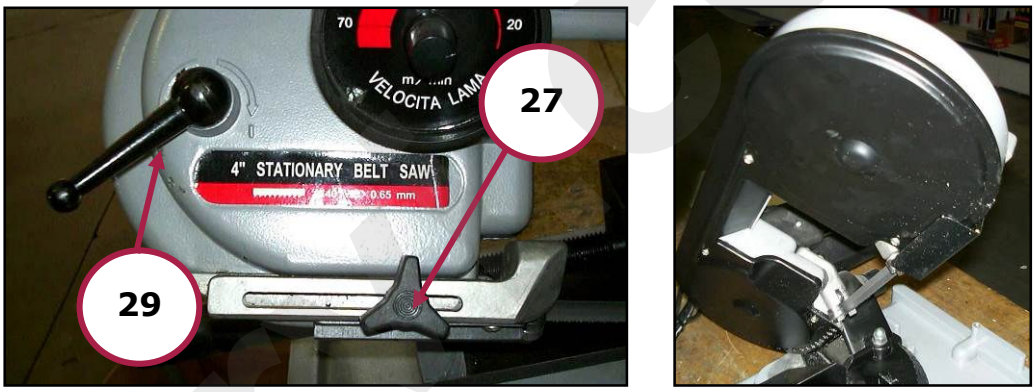

Figure 16 – A: Guide blade and blade tensioning lever. B: Rear guard.

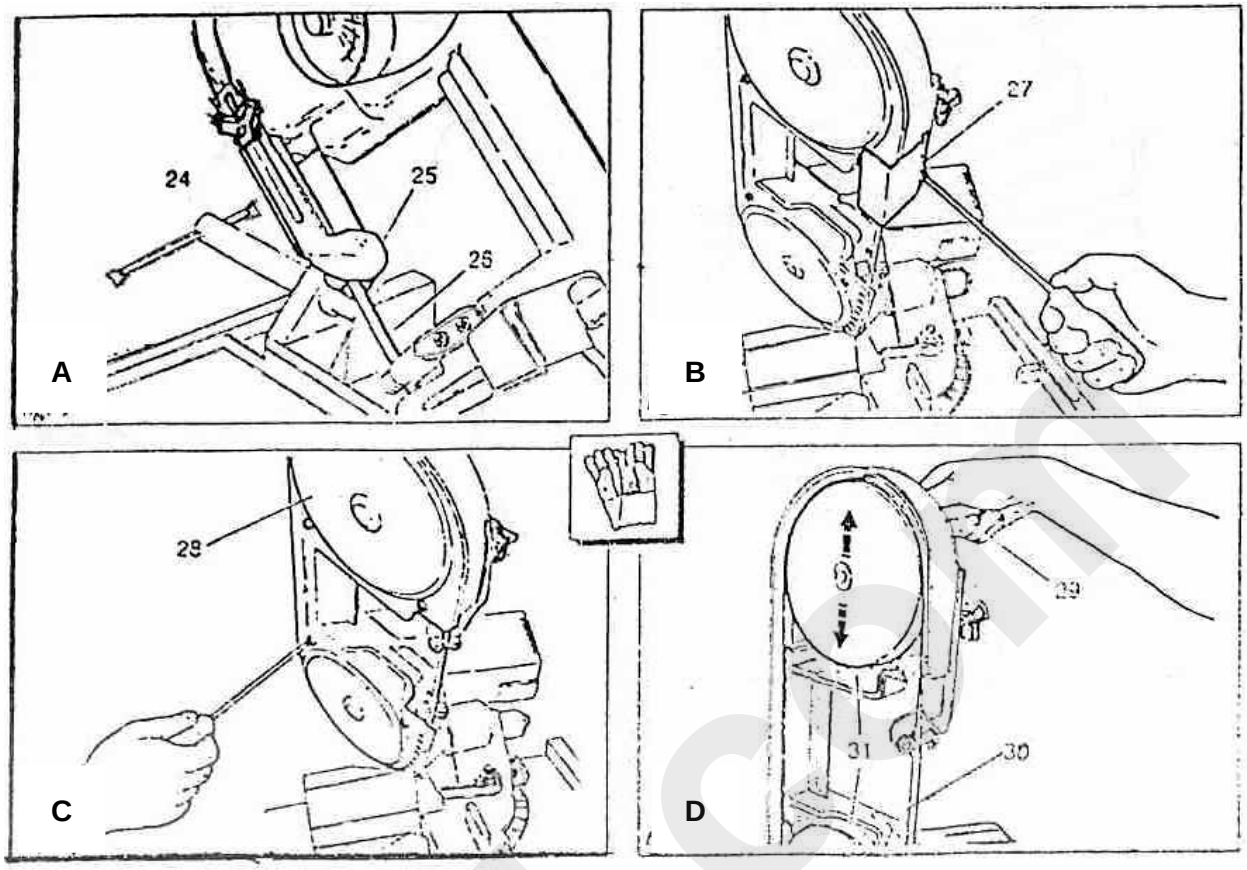

Figure 17 - Changing the bandsaw blade.

2. Using a screwdriver, remove the fixing screws of the rear protection guard (see Figure 16 and ref.28 in Figure 17/C) and remove it.
3. Turn the blade tensioner lever (see ref.29 in Figure 16 and Figure 17/D) to the "-" position to release the blade tension.
4. Extract the saw blade (ref.30 Figure 17/D).
5. Insert the new blade into the saw, paying attention to the cutting direction and first placing it between the blade guide rollers and then between the rubber pulleys (ref.31 Figure 17/D).
6. Turn the blade tensioner lever again (see ref.29 in Figure 16 and Figure 17/D) to the "+" position to put the blade under tension. Moving the lever all the way, the blade will automatically go into cutting position when the motor begins to turn.
7. Remount the guard (see Figure 16 and ref.28 in Figure 17/C) and the angular plate of the moveable blade guide (see ref.27 in Figure 16 and Figure 17/B).

First cut with new blades

To preserve the effectiveness of the blade over time, do not use maximum cutting pressure during the first 4-6 cuts.

11 ELECTRICAL CIRCUIT

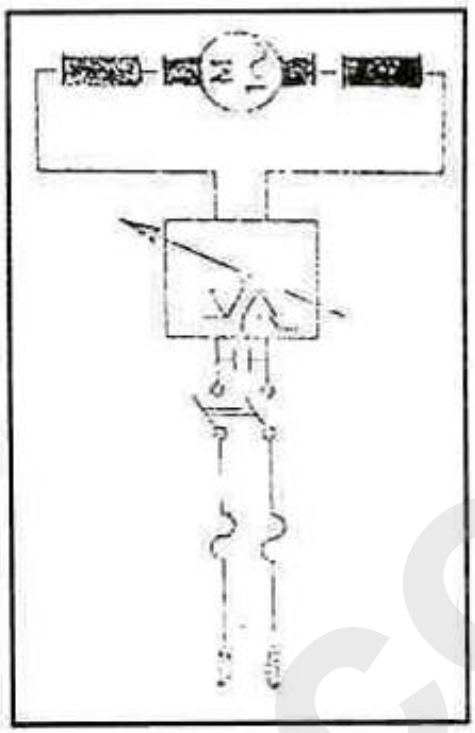

Figure 18 - Diagram of the electrical circuit

12 SPARE PARTS

Always clearly indicate:

- the symbol and the serial number of the machine;
- the code number of the parts;
- number of parts;
- exact address of your company.

Genuine Parts

The manufacturer disclaims any liability for damages of any kind caused by the use of non-original spare parts.

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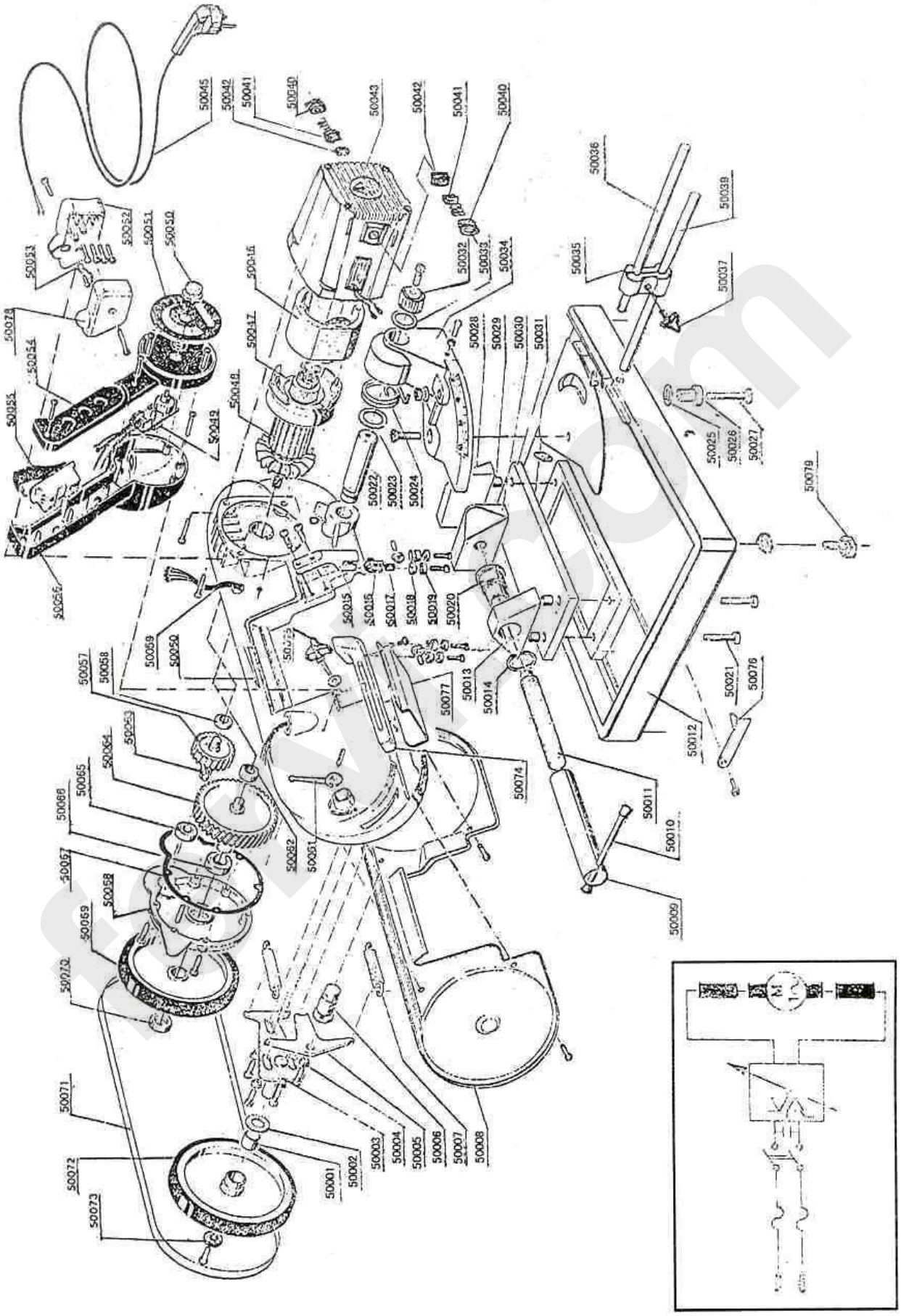
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No.	Descr.	Code	Description	No.	Descr.
05000/01	Plain bearing	0500/28	Rear jaws	0500/55	Switch
05000/02	Nylon washer	0500/29	Plain bearing	0500/56	Rear handle
05000/03	Slide	0500/30	Sliding jaws	0500/57	Secondary gear
05000/04	Special bushing	0500/31	Base plate	0500/58	Bearing
05000/05	Spring holder	0500/32	Special chassis	0500/59	Slot
05000/06	Eccentric pin	0500/33	Nylon washer	0500/60	Head body
05000/07	Spring	0500/34	Swivel body	0500/61	Lever
05000/08	Casing	0500/35	Rear bracket	0500/62	Bearing
05000/09	Extension cord	0500/36	Front bracket	0500/63	Intermediate gear
0500/10	Lever	0500/37	Knob	0500/64	Final gear
0500/11	S.F. screw	0500/38	Lock bar	0500/65	Bearing
5000/12	Base	0500/39	Fixed bar	0500/66	Bearing
0500/13	Spiral door	0500/40	Brush cover	0500/67	Gasket
0500/14	Elastic ring	0500/41	Brush	0500/68	Cover
0500/15	Fixed blade guide	0500/42	Brush holder	0500/69	Drive pulley
0500/16	Door mat	0500/43	Motor body	0500/70	Special nut
0500/17	Mat	0500/44	Nameplate	0500/71	Blade
0500/18	Bearing	0500/45	Cable with plug	0500/72	Duct pulley
0500/19	Bearing	0500/46	Stator	0500/73	Special washer
0500/20	Casing	0500/47	Conveyor	0500/74	Sliding guide blade
0500/21	T.E. screw	0500/48	Connection	0500/75	Adjustable lever
0500/22	Shaft	0500/49	Electronic regulator	0500/76	Locking lever
0500/23	Nylon washer	0500/50	Knob	0500/77	Small guard
0500/24	Spring	0500/51	Nameplate	0500/78	Terminal cover
0500/25	FE washer	0500/52	Terminal	0500/79	Feet
0500/26	Ratchet	0500/53	Grommet		
0500/27	Special screw	0500/54	Front handle		

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13 TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
Noisy operation.	A) Damaged bearings. B) Bearings not lubricated. C) Blade friction. D) Blade loose.	A) Contact Technical Support. B) Lubricate. C) Remove / replace the blade and check sliding. D) Turn the blade tension lever.
The motor will not start.	A) Electrical power supply. B) Electrical connections. C) Burnt motor windings. D) Blown fuses. E) Broken switch.	A) Check the mains power supply. B) Check the wiring connections. C) Contact Technical Support. D) Replace the fuses. E) Contact technical support.
Poor cutting efficiency or excessive overheating of the blade.	A) Excessive pressure on the workpiece. B) Blade worn or does not cut well. C) Material too hard.	A) Apply less pressure. B) Check the blade sharpness and wear. C) Lubricate as you work.

14 WAREHOUSE STORAGE

In the event that the machine should be stored and unused for some time, it must be kept in a closed environment free of moisture to avoid damage and/or deterioration.

15 DISPOSAL OF PARTS AND MATERIALS

If the machine is to be scrapped, its parts must be disposed of separately.

Respect the Environment!

Contact a specialist centre for the collection of metallic materials.

The structure of the **Band saw** and the blade is made from steel, while some parts such as the handle, the casing of the electric motor, etc. are made from polymeric material. In this regard, differentiate the materials according to their nature, with the assistance of specialist companies authorized for waste disposal, in compliance with the requirements of the law.

Respect the environment!

Dispose of cuttings (chips, filings cutting etc..) In accordance with local regulations.

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